

Appn. No. 09/911,522
Amendment dated March 14, 2005

REMARKS

Reconsideration is respectfully requested.

Claims 1 through 20 remain in this application. No claims have been cancelled or withdrawn or added.

Claims 3, 5, 6, and 7 have been amended to make the terminology usage more consistent with the description of the invention at pages 8 and 9. The minor changes in the wording of these claims are not thought to affect the patentability of the application.

The Examiner's rejections will be considered in the order of their occurrence in the Office Action.

Paragraph 2 of the Office Action

Claim 15 has been objected to for the informalities noted in the Office Action.

Claim 15 has been amended in a manner believed to clarify any informalities in the language. Specifically, "tha" has been deleted and "that" has been inserted in the language of the claim.

Withdrawal of the objection to claim 15 is therefore respectfully requested.

Paragraphs 3 and 4 of the Office Action

Claims 8, 17 and 18 have been rejected under 35 U.S.C. §112 (first paragraph) as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention.

The text of claim 8, as originally filed, has been added to the paragraph of the description of the specification of the present application

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at page 9, line 6. As this subject matter was a part of claim 8 as filed, and the claims filed in the original application form a portion of the original disclosure of the application, it is submitted that no new matter has been added to the disclosure through this amendment of the specification.

Withdrawal of the §112 (first paragraph) rejection of claims 8, 17 and 18 is respectfully requested.

Paragraphs 5 through 7 of the Office Action

Claim 1 has been rejected under 35 U.S.C. Section 103(a) as being unpatentable over Wu (US 6,553,364) in view of Kirsch et al. (US 6,018,733).

Claim 1 requires, in part, "obtaining a candidate database listing having a plurality of databases each having a collection of content" and "acquiring a listing of a plurality of qualified databases from said candidate database listing by matching *each one of a candidate databases to said plurality of subject areas*".

It is conceded in the Office Action that:

Wu does not explicitly disclose obtaining a candidate database listing having a plurality of databases each having a collection of content; and acquiring a listing of a plurality of qualified databases from said candidate database listing by matching each one of a candidate databases to said plurality of subject areas; submitting said query to said plurality of qualified databases.

It is then asserted that

Kirsch teaches obtaining a candidate database listing having a plurality of databases each having a collection of content; and acquiring a listing of a plurality of qualified databases from said candidate database listing by matching each one of a candidate databases to said plurality of subject areas; submitting said query to said plurality of qualified databases (Kirsch, Abstract, col. 4, lines 37-67).

The Kirsch patent at col. 4, lines 38 through 67 states:

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Thus, a general purpose of the present invention is to provide an efficient and effective method of selecting the likely most relevant collections for searching based on an ad hoc query.

This is achieved by the present invention through method permitting iterative performance of collection selection relative to a set of databases, where each the database includes a plurality of documents, to obtain consistent relative-ranking collection selection results for each iteration. The method comprises the steps of (a) obtaining a collection selection query including a set of predetermined search terms; (b) determining an inverse collection frequency for each member of the set of predetermined search terms with respect to each the database and the set of databases, and determining a document frequency for each member of the set of predetermined search terms with respect to each the database; (c) determining a ranking value for each the database based on a sum of the products of the inverse collection frequencies for the set of predetermined search terms and the document frequencies for respective members of the set of search terms; (d) selecting a subset of the set of databases based on predetermined criteria dependant on the ranking value for each the database; and (e) selectively repeating portions of the steps (b) through (d) with respect to each member of the set of predetermined search terms for each iteration of the method.

An advantage of the present invention is that the method provides for both automated and manual description to be used in selecting collections that contain the most likely relevant documents in relation to an ad hoc query.

However, while the foregoing description might indicate that a search is performed on search terms, it is submitted that this would not lead one of ordinary skill in the art to "matching each one of a candidate databases to said plurality of subject areas", as required by claim 1.

Further, the combination of Wu and Kirsch is asserted to be proper in the Office Action because (emphasis added):

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a list of candidate databases and submit the query to a qualified database in the system of Wu because the content in the qualified databases are more relevant to the query than other contents in other databases. This ensures the search retrieves desired results in a short time.

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However, the Office Action must provide specific, objective evidence of record for a finding of a suggestion or motivation to combine reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. In re Sang Su Lee, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002). The Office Action states that the motivation to combine Wu and Kirsch is to "ensure[] the search retrieves desired results in a short time." It is respectfully submitted that given the actual teachings of the references, the cited motivation to combine is not found in the references themselves. The cited references do not state that their purpose or benefit is to provide the delivery of results in a short time. More particularly, it is noted that nowhere in the several advantages set forth in cols. 4 and 5 of Kirsch is there any mention of any time savings that might be achieved by the use of the Kirsch system, and thus it is submitted that one of ordinary skill in the art would not gather from the Kirsch patent that any time savings could be achieved by combination of its system with any existing system. It is therefore respectfully submitted that the quoted statement from the Office Action is merely a conclusory statement of belief and not specific objective evidence of a motivation to combine.

It is therefore submitted that the cited patents, and especially the allegedly obvious combination of Wu and Kirsch set forth in the rejection of the Office Action, would not lead one skilled in the art to the applicant's invention as required by claim 1.

Withdrawal of the §103(a) rejection of claim 1 is therefore respectfully requested.

Paragraph 8 of the Office Action

Claims 2 through 14 and 16 through 20 have been rejected under 35 U.S.C. Section 103(a) as being unpatentable over Wu (US 6,553,364) in view of Kirsch et al. (US 6,018,733) and further in view of Ferguson et al. (US 6,237,011 B1).

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Claim 2 requires, in part, "obtaining an exclusion list providing a plurality of *terms and sources* to inhibit associations for said step of acquiring a collection of responsive content" and "obtaining an inclusion list providing a plurality of *terms and sources* restricting associations for said step of acquiring a collection of responsive content" (emphasis added).

It is conceded in the Office Action that:

... neither Wu nor Kirsch teaches obtaining an exclusion list providing a plurality of terms and sources to inhibit associations for said step of acquiring a collection of responsive content; obtaining an inclusion list providing a plurality of terms and sources restricting associations for said step of acquiring a collection of responsive content.

But it is then contended in the Office Action that:

Ferguson teaches obtaining an exclusion list providing a plurality of terms and sources to inhibit associations for said step of acquiring a collection of responsive content; obtaining an inclusion list providing a plurality of terms and sources restricting associations for said step of acquiring a collection of responsive content (Ferguson, col. 9, lines 1-15).

The Ferguson patent is generally directed to a document management system for managing discrete static documents on a database. Looking to the referenced portion of the Ferguson patent at col. 9, lines 1 through 15, it is stated that (emphasis added):

With respect to semi-automatic and automatic categorization, there are two filter types associated with each smart folder. The first filter type generates an inclusion list. The inclusion list identifies those documents that were not automatically included in the category associated with the smart folder during the categorization process. The inclusion list may provide the user with an indication that the category criteria associated with that category are too restrictive. The second filter type generates an exclusion list. The exclusion list identifies those documents that were not automatically excluded from the category associated with the smart folder during the categorization process. The exclusion list may provide the user with an indication that the category criteria associated with that category are not restrictive enough (i.e., the category criteria is too aggressive). Both

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lists are manually manipulated by the user. Accordingly, the user can modify the two lists as needed

As can be appreciated from the words of the referenced portion of the Ferguson patent reproduced above, this portion of the Ferguson patent in particular refers to an inclusion list that relates to "documents" (and not "terms and sources") and an exclusion list that relates to "documents" (and also not "terms and sources"). It is submitted that one of ordinary skill in the art, considering the referenced portion of the Ferguson patent, would not be led to the requirements of claim 2, particularly the requirements that "an exclusion list providing a plurality of *terms and sources*" and "an inclusion list providing a plurality of *terms and sources*" by its description of lists that are specifically directed to *documents*. Clearly, the Ferguson patent does not describe a system in which an inclusion list or an exclusion list includes "terms", and similarly the Ferguson patent does not describe a system in which an includes list or an exclusion list includes "sources". At most, the lists in Ferguson include specific documents of the documents contained on the database, and this does not suggest that these lists extend to "terms" or "sources".

With respect to claim 3, it requires, in part, "capturing an initial page from each one of said plurality of candidate databases", "evaluating said initial page for *relevancy to said each one of said subject areas*", and "selecting databases according to relevance to said subject areas".

It is conceded in the Office Action that Wu and Kirsch do not: explicitly disclos[e] capturing an initial page from each one of said plurality of candidate databases; evaluating said initial page for relevancy to said each one of said subject areas; qualifying databases according to relevance to said subject areas; associating said qualified databases with said subject areas.

But it is then contended that:

Ferguson teaches using a seed document to categorize documents (Ferguson, col. 8, lines 15-21). It is well known in the art that a

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system or user can use a seed document to categorize documents and identify its subject area.

However, turning to the referenced portion of the Ferguson patent at col. 8, lines 15 through 21, it states:

Here, each category is represented by a smart folder that initially contains a "seed" document. The "seed" document is then analyzed by the categorization utility 159, and the category criteria (i.e., the key words and/or attributes) are automatically extracted. Existing documents and new documents that match the automatically extracted category criteria are linked with the smart folder through their corresponding STG files.

Here, the Ferguson patent describes a process where a "seed" document is associated with a folder, and "category criteria" are *extracted* from the seed document, so that "existing" and "new" documents with similar "category criteria" may be matched with the similar "seed" document. This is in stark contrast to the requirements of claim 3, which recites "evaluating said initial page for *relevancy to said each one of said subject areas*". Thus, whereas the Ferguson system derives or extracts "category criteria" *from* the seed document (in order to be able to associate other documents that are similar to the seed document with the seed document in the same folder), claim 3 requires evaluating the initial page for relevancy to "each one of said subject areas". It is submitted that these are two virtually opposite scenarios, one in which a document dictates the category criteria that is to be used to evaluate other documents, while the claimed invention evaluates a document for relevancy to subjects areas to which the document may or may not have any relevancy. Clearly, in the Ferguson system, since the criteria are "extracted" from the document, all of the criteria derived from the document will be "relevant" to the document, and it would be superfluous to evaluate the document with respect to the extracted criteria. It is therefore submitted that one of ordinary skill in the art, considering the referenced portion of the Ferguson patent, would not be led to the requirements of claim 3 that recite "capturing an initial page from each one

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of said plurality of candidate databases" and "evaluating said initial page for relevancy to said each one of said subject areas", as the Ferguson patent clearly operates in an opposite manner to what is required by the claim.

With respect to claim 4, it depends from claim 3 and therefore it is submitted that the foregoing remarks regarding claim 3 also apply to claim 4.

With respect to claims 5 through 7, it is noted that claim 5 has been amended to depend from claim 3, to further clarify the aspects of the initial "selection" process (as defined in claim 3) and the subsequent "qualification" of databases that were selected in the "selection" process. Claim 5, as amended, requires "submitting a query to each of said *selected* databases", "capturing a plurality of pieces of responsive content provided by each of said *selected* databases", "evaluating each of said plurality of pieces of responsive content for relevancy to said query", assigning a numerical score to each one of said plurality of pieces of responsive content, said numerical score representing a degree of relevance to said query", "developing an aggregate score for each one of said selected databases", and "*qualifying a portion of said selected databases based upon said aggregate score to be polled for content*".

It is submitted that the Wu, Kirsch, and Ferguson patents, either alone or in combination, would not lead one of ordinary skill in the art to the selection of the databases from the candidate databases (based upon an initial page of each of the databases), as set forth in claim 3, especially in combination with the "qualification" of a portion of the selected databases based upon the quality of the responsive content returned by the selected databases generated as a result of submitting the query to the selected databases. None of the cited patents leads one of ordinary skill in the art to a process of at least two stages in which an initial page of a database is first examined, and then results from a search of the database is examined.

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With regard to claim 8, it requires "analyzing an initial page from each one of said plurality of qualified databases for formatting", "*determining an input location for passing queries by said initial page to each one of said plurality of databases*", "*determining results locations for capturing search results returned from each one of said plurality of databases*", and "*recording said input location and said results locations for use in formatting queries for each one of said databases*".

It is asserted in the Office Action that the allegedly obvious combination of Wu, Kirsch and Ferguson:

... teach analyzing an initial page from each one of said plurality of qualified databases for formatting (Wu, col. 5, lines 1-14); determining an input location for passing queries by said initial page to each one of said plurality of databases; determining results locations for capturing search results returned from each one of said plurality of databases; recording said input location and said results locations for use in formatting queries for each one of said databases

The cited portion of the Wu patent states (at col. 4, line 65 through col. 5, line 14):

Each record 38 is shown with a document number 40 and content 46. In the case of a document which is a category, content 46 is the title of the category and other text (not shown), such as hidden keywords, synonyms, descriptions, etc., while the content of documents which refer to sites includes a title, a URL, a description, hidden keywords, synonyms, etc. Of course, some of these elements can be blank, where appropriate or desired. As explained above, in the Yahoo! search database, the documents are positioned in the hierarchical structure by an editorial staff. In a typical procedure, a site promoter will submit site information to the editorial staff, such as a site title, site URL, proposed location in the hierarchy, description, etc. The editorial staff then evaluates the submission, changing the suggested location if a more appropriate location exists, cross links as needed, and adds, in some cases, hidden keywords, synonyms and/or a document importance weighting value.

While this portion of the Wu patent arguably indicates some examination of a document on the Internet, it does not indicate that there is any analysis of

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an "initial page", and more importantly there is absolutely no mention of any examination of the document for any "input location" for a query, or any examination of the document for any "output locations". It is therefore submitted that one of ordinary skill in the art, considering this portion of the Wu patent, would have absolutely no idea that the Wu system involves any determination of input or output locations, much less any "recording" of the input and output locations discovered.

It is further asserted in the Office Action with respect to the rejection of claim 8 that:

(The applicants does not disclose the limitations determining an input location and determining results locations in the specification. Wu teaches a search engine, Fig. 1 & 5. a search engine obviously determines an input location in order to allow the user to input search request).

(Initially, it is noted that, as indicated above in this response, that the claims as filed in a patent application form a portion of the "specification", and applicants have copies the disclosure of claim 8 into the description portion of the specification in order to overcome the objection to the specification made in the Office Action.) It is submitted that, while a search engine might have a location to input a search term for conducting a search by that search engine, Wu fails to disclose a search engine that locates input and output locations on initial pages of databases. As the purpose of the Wu search engine is clearly to identify websites pertaining to a search term or terms entered by the user using the Wu search engine, whether or not any websites turned up by the search include an "input location" or any "output locations" is not needed to perform the search engine function disclosed by Wu. Wu does not even come close to describing such a determination, much less recording the results of such a determination, and therefore it is submitted that neither Wu nor the other patents cited here would lead one of ordinary skill in the art to the requirements of claim 8.

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With respect to claim 10, it includes a number of requirements, including "removing duplicate pieces of responsive content". It is conceded in the Office Action that (emphasis added):

Wu and Kirsch do not explicitly disclose removing duplicate pieces of responsive content. Ferguson teaches monitoring the document duplicates (Ferguson, col. 17, lines 19-20). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to monitor document duplicates and remove the duplicate pieces of document in order to organize the document neatly and save storage space.

However, it is submitted that the description in Ferguson does not support the conclusion made in the Office Action, as Ferguson merely describes at col. 17, lines 19 through 20 "The file helper. . . monitors the document collection for document duplicates" (emphasis added). Claim 10 requires "removing duplicate pieces of responsive content", but the Ferguson patent merely indicates that duplicate documents are "monitored", but says nothing about any "removal" of the duplicates, as is apparently assumed in the rejection of the Office Action. It cannot be assumed that simply because duplicates are monitored that they are also removed, as a document management system such as is disclosed by Ferguson could just as likely create a link between duplicates that makes sure that changes to one "duplicate" document are also made to another "duplicate" document, or could notify a user accessing one "duplicate" document that another "duplicate" document exists, has been accessed, or has been changed, for example. It is therefore submitted that any assumption that duplicates in the Ferguson patent are always destroyed is merely speculative.

Further, claim 10 also requires "obtaining a population parameter for *limiting a number of pieces of responsive content which may be matched to any one subject area*" and "obtaining an occurrence parameter for *limiting a number of subject areas to which any one piece of responsive content may*

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be matched" (emphasis added). With respect to claim 10, it is suggested in the Office Action that:

... Wu, Kirsch and Ferguson... teaches obtaining a population parameter for limiting a number of pieces of responsive content which may be matched to any one subject area (Wu, col. 12, lines 45-53); obtaining an occurrence parameter for limiting a number of subject areas to which any one piece of responsive content may be matched (Wu, col. 12, lines 45-53); restricting matches for each one of said subject areas according to said occurrence parameter and said population parameter (Wu, col. 12, lines 45-53).

Thus, the portion of Wu that is cited for teaching each of these two requirements is at col. 12, lines 45 through 53, where it is stated:

When the heap is empty, the output list will contain all of the documents which match the OR criteria. All of the output list entries will be direct matches and will have an associated match count. If the requirement that each match contain at least one subterm directly is not imposed, the output list might be in the form of a match list suitable for further processing. The match count can be used, alone or in combination with importance weighting, to order documents according to relevance.

However, the Wu patent here is merely discussing a score (match count) for individual documents, but does not indicate that there is any limitation on the number of the "number of pieces of responsive content" that may be associated with a subject area, as there does not appear to be any limitation imposed on the number of documents that may be associated with the search, and the only factor of significance here is relevance, which does not impose a limitation on the *number* of documents, but appears to be more of a *qualitative* limitation, not a *quantitative* limitation. Also, this portion of Wu does not discuss any limit on the number of "output lists" with which a single document may be associated, and there does not appear to be any limitation on the number of lists on which a document may reside.

It is therefore submitted that the Wu patent, either alone or in combination with the Kirsch and Ferguson patents, could not lead one of ordinary skill in the art to the requirements of claim 10.

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Claim 16 requires, in part, "each one of said plurality of databases providing a dynamic response based upon a specific query". The rejection of claim 16 in the Office Action lacked any indication of where in the prior art the Patent Office believes that this feature of the invention is taught, as this requirement is not present in claim 1.

Withdrawal of the §103(a) rejection of claims 2 through 14 and 16 through 20 is therefore respectfully requested.

Paragraph 9 of the Office Action

Claim 15 has been rejected under 35 U.S.C. Section 103(a) as being unpatentable over Redfern (6,078,914).

Claim 15 requires, in part, "a results index to allow for rapid recovery of specific portions of any one of said plurality of documents characterized by said selection module". In the Office Action, it is conceded that:

Redfern does not explicitly disclose a result index. However, it is well known in the art that a search provides a results index in order to organize and rank the results and allow the user to rapidly retrieve the results.

However, it is submitted that such a result index of the character required by the language of claim 15 is not "well known in the art", and applicants request the citation of prior art that establishes such knowledge in the art, as required by MPEP §2144.03(C), or withdrawal of the §103(a) rejection of claim 15 is therefore respectfully requested.

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CONCLUSION

In light of the foregoing amendments and remarks, early reconsideration and allowance of this application are most courteously solicited.

Respectfully submitted,

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